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COST ACCOUNTING STANDARDS REQUIREMENTS

INTRODUCTION

In American industry in general very little authoritative criteria have been issued for establishing requirements for cost accounting, particularly relating to the basis for allocating indirect cost to specific products or contracts. The methodologies used to allocate indirect costs are essentially matters of managerial preference. This absence of authoritative criteria is not the case with government contracts. In order to have an understanding of indirect cost management in the defense contracting environment, it is necessary to be familiar with the work of the Cost Accounting Standards Board. Their work has resulted in detailed guidance on accounting for indirect costs, particularly on defining acceptable methods for allocating these costs. Although the defense industry has always been represented on the CASB, many defense contractors have legally challenged many of the standards' provisions. This complicated litigation history adds to the challenges that face personnel who do not have extensive cost accounting backgrounds. Many acquisition personnel consider the Cost Accounting Standards to be among the most complicated of government regulations.

It is interesting to note that the necessity for cost accounting standards originated with congressional testimony by a military officer and nuclear engineer, Adm. Hyman Rickover. He maintained that because of the lack of guidance on cost accounting practices in American industry, the government was unable to determine what actual costs and profits were on defense contracts even though cost breakdowns were

extensively negotiated prior to contract award. Subsequent studies of defense contracts spurred by Admiral Rickover's testimony indicated that comparing actual costs of contract performance with earlier contract cost estimates was practically impossible. Of particular importance from a program management standpoint, it was alleged that not only were contract performance reports not structured in the same fashion as original cost proposals, but contractors were changing their cost accounting methods during the performance of contracts. The ability to identify possible contract cost overrun problems, particularly regarding overhead costs, was very troublesome for acquisition managers under these circumstances. As a result of problems identified subsequent to Admiral Rickover's testimony, the CASB was established in 1970 as an independent body reporting to Congress. It was created to help assure the government of a fair price in its procurement and to issue rules, regulations, and standards aimed at achieving uniformity and consistency in the cost accounting practices that were followed by defense contractors and subcontractors.

The CASB then became an executive authority for issuing pronouncements relating to the measurement, assignment, and allocation of costs. The purpose of regulations promulgated by the CASB is to provide for the disclosure of contractor's actual cost accounting practices and to develop standards to be used in connection with negotiated contracts. Cost accounting standards were originally applicable only to defense contracts, but now apply throughout government, to negotiated contracts and sub-

contracts valued at \$500,000 and above. This change extends CAS coverage to many government contractors for the first time. Today, the board is organized under the Office of Federal Procurement Policy (OFPP) and consists of five members representing government, industry, and the accounting profession.

Exhibit 14, "Cost Accounting Standards," identifies the comprehensive standards issued by the CASB and provides a brief summary of each standard's requirements. The promulgations of the CASB have the full force and effect of law on those contractors subject to the standards. The CASs provide guidelines related to the allocability of costs to government contracts and do not provide guidance on those costs' allowability—a totally different concept. Allowability is a procurement concept while allocability is an accounting concept. Guidance on allowability is provided in the FAR and DFARS.

It should be emphasized that cost accounting standards do not apply to contracts awarded based upon market prices of commercial items or when contractors do not need to submit cost data to form the basis for negotiation with the government. The regulations also provide that small business concerns are exempt from the Cost Accounting Standard requirements.

APPLICABILITY

Cost Accounting Standards apply to contracts and not government agencies or contractors. Contracts subject to CASs are negotiated contracts in excess of \$500,000 and are referred to as "covered contracts." Subcontracts are subject to the cost accounting standards only if the prime contract, or a higher tier subcontract, is a covered contract. A CAS-covered contract may be subject to either full or modified CAS coverage. Full CAS coverage, which requires that

the contractor comply with all of the cost accounting standards in effect on the date of award of the contract, applies to a business unit that received either (1) a single CAS-covered contract of \$25M or more, or (2) a net total of \$25M in CAS-covered awards during the previous cost accounting period of which at least one exceeded \$1M.

A CAS-covered contract is eligible for modified CAS coverage if neither of the above criteria are met. A modified CAS contract is subject only to CAS 401, "Consistency in Estimating, Accumulating, and Reporting Costs"; CAS 402, "Consistency in Allocating Cost Incurred for the Same Purpose"; CAS 405, "Accounting for Unallowable Costs"; and CAS 406, "Cost Accounting Period."

DISCLOSURE STATEMENT

The CAS Disclosure Statement, which applies to contractors and not to contracts, provides a comprehensive description of the contractor's cost accounting practices to be used on contracts subject to the CASB rules. Contractors and subcontractors meeting the below criteria are required, as a condition of contracting, to provide written disclosure of their actual or proposed cost accounting practices. Those required to submit a disclosure statement are: (1) any business unit that is selected to receive a CAScovered contract or subcontract of \$25M or more, and (2) any company that, together with its segments, received net awards of negotiated prime contracts and subcontracts subject to CASs totaling more than \$25M in its most recent cost accounting period, of which at least one contract totals more than \$1M. When a disclosure statement is required, a separate disclosure statement must be submitted for each segment whose costs included in the total price of any CAS-covered contract or subcontract exceed \$500,000.

Among other things, the disclosure statement provides essential information on the contractor's indirect cost pool structure, including a functional breakdown of indirect expenses and the various bases used for allocating indirect costs. In addition, the contractor must disclose its method of distinguishing direct from indirect costs. The disclosure statement provides acquisition personnel with a valuable tool to help them understand the company-specific cost accounting practices the contractor follows. Government acquisition personnel must treat contractor's disclosure statements as highly confidential information. The statements cannot be released to the public, as a competitive disadvantage could result from any such disclosure.

Contractors are required to certify on each contract pricing proposal cover sheet whether or not a disclosure statement has been submitted. The lack of a disclosure statement can prevent a contractor from receiving a contract award. Separate disclosure statements are required for each business unit within the contractor organization that uses different cost accounting practices.

COST ACCOUNTING STANDARDS RELATING TO INDIRECT COSTS

Eight of the Cost Accounting Standards are especially important for the understanding of indirect costs. Each of these is described in more detail below:

CAS 401: Consistency in Estimating, Accumulating, and Reporting Costs. This standard requires that a contractor must be consistent in the way it estimates costs to price a proposal and subsequently accumulates and reports those costs—especially the classification of elements or functions of costs as direct or indirect, the indirect cost pools to which each element or function of cost is charged, and the methods of

allocating indirect costs to the contract. Costs estimated for proposal purposes are to be presented in such a manner and in such detail that any significant cost can be compared with the actual cost accumulated and reported. Specific examples are provided in the standard to illustrate applications of cost accounting standards that are determined to be consistent and those that are considered to be inconsistent.

Noncompliance with CAS 401 can occur when a contractor has failed to estimate costs in accordance with established or disclosed cost accounting practices; and can also occur when a contractor estimates in accordance with its disclosed or established cost accounting practices but accumulates on a different basis. Suppose that a contractor estimates the costs for a costtype contract based on its practice of allocating manufacturing overhead using direct labor dollars. After award of the contract, the manufacturing overhead allocation base is changed to machine hours without notifying the government of the change and without submitting a disclosure statement revision. Further, assume that this change resulted in a significant cost overrun on the cost-type contract as costs were shifted from fixed-price contracts to cost contracts. This inconsistency would represent a noncompliance with CAS 401, because the contractor did not accumulate costs on the same basis as the estimates were made. In this case, a noncompliance with the CASs occurred because the contractor did not notify the government of the change and submit the required disclosure statement revision. Contractors are allowed to change accounting practices, provided that the required notifications and submissions are made.

Compliance with CAS 401 requirements improves the managerial visibility over costs during contract performance and facilitates the evaluation of a contractor's estimating capabilities. Note that CAS 401 does allow a contrac-

tor to use greater detail in accumulating and reporting costs than in estimating costs. For example, a contractor may record engineering indirect labor based on actual costs for each individual, but estimate on the basis of an average indirect labor rate for such labor.

CAS 402: Consistency in Allocating Cost Incurred for the Same Purpose. CAS 402 is intended to prevent so-called "double counting" of costs. Double counting occurs when cost items are charged directly to a contract without eliminating like cost items from indirect cost pools that are also allocated in some part to that contract. Thus a contract might be charged directly with a specific direct cost but get an additional share of the same kind of cost incurred for other purposes through an indirect cost allocation. Consequently, the standard requires that all costs incurred for the same purpose in like circumstances be treated either as direct costs only or as indirect costs only in making allocations to contracts. As an example, suppose a contractor normally allocates all travel costs as indirect cost and previously disclosed this practice in his disclosure statement. For purposes of a new proposal, the contractor intends to charge the travel costs of personnel whose time is charged as direct labor directly to the contract. Since travel costs of personnel whose time is accounted for as direct labor working on other contracts are costs which are incurred for the same purpose, these costs may no longer be included within indirect cost pools for purpose of allocation to any covered government contract.

The government is quite concerned with the strong motivation on the part of contractors to charge the maximum amount of costs direct to cost-type contracts. This could occur when a particular cost is charged direct to government cost-type contracts and charged indirect when related to government fixed-price or commer-

cial contracts. As an example, assume that the costs of program management for a government cost-type contract are charged direct to the contract. Further, assume that these same types of costs for fixed-price and commercial contracts are included in overhead costs and allocated to all final cost objectives including the government cost-type contract. As a result, the government cost-type contract is allocated all program management costs associated with that contract and a share of the program management costs of all other contracts. Such inconsistencies result in double counting, with excessive charges to the government.

On the other side of the coin and from the contractor's perspective, government personnel should not request preferential treatment by asking the contractor to absorb certain costs as indirect that should be charged as direct in accordance with the contractor's accounting practices. For example, assume that a government cost-type contract requires special security personnel due to the classified nature of the work. Government personnel should not ask the contractor to include these people in his normal plant security force in order to charge the cost as indirect. In this case, fixed-price and commercial contracts would receive an allocation of the contract security costs while they received no benefit from the incurrence of the costs. The important test is a determination as to whether the costs were incurred "for the same purpose" and "in like circumstances." In this case, security personnel required for a specific contract are not like costs, in like circumstances with general purpose plant security costs. Government personnel should also be very cautious about requesting "preferential" program overhead rates that could destroy the total perspective of fair and equitable distribution of indirect costs. Compliance with such a request could place the contractor in potential violation of CAS 402.

A matter for important note is that bid and proposal costs incurred pursuant to the specific requirement of an existing contract are considered to have been incurred in different circumstances with other bid and proposal costs and may be charged direct to the specific contract. The circumstance is quite different because the costs of preparing proposals specifically required by the provisions of an existing contract relate only to that contract, while other proposals relate to all work of the contractor. Therefore, such costs are not "like-cost" incurred in "like circumstances" and do not constitute double counting. To ensure compliance with this standard, the contractor's disclosure statement should clearly describe the criteria used to distinguish between direct and indirect costs.

CAS 403: Allocation of Home Office Expenses to Segments. This standard establishes criteria for allocating home office-type expenses to business segments based on the "causal or beneficial" relationship between home office expenses and certain business segments. The impact of the standard has been to cause companies to significantly increase the cost that is separately identified and directly allocated from home offices to business segments. The standard stresses the importance of minimizing the amount of "residual expenses" or those expenses remaining at the home office to be allocated as overall management expense. A three-step sequential process is defined for allocating home office expenses:

1. Direct Allocation. Expenses are identified for direct allocation to specific business segments to the maximum extent possible. Direct allocation is mandatory, not an option, when a practical identification can be made. For example, government procurement policy costs might be directly identified with the business segment doing business with the government, while manufacturing policy costs might be iden-

tified with business segments engaged in manufacturing.

- 2. Indirect Allocation. Expenses that are not directly allocated should be pooled into logical and homogeneous groups and then allocated using appropriate bases that show the relationship of the expenses to the segments concerned. Examples of such indirect expenses and appropriate allocation bases are:
- personnel administration: number of employees, labor hours, payroll, number of hires;
- data processing services: machine time, number of reports prepared;
- centralized purchasing: number of purchase orders, value of purchases, number of line items:
- centralized warehousing: square footage, value of materials, volume; and
- central telephone service: usage costs, number of instruments.
- 3. Residual Expenses. Home office expenses that remain after all direct and indirect allocations have been made should be allocated based on a total activity base. These expenses generally have no special benefit to any particular segment but are necessary to the overall business operations. Examples of such expenses are the chief executive officer, chief financial officer, board of directors, and any staff who cannot be identified with specific activities of a business segment. When residual expenses exceed a certain amount, the standard requires the use of a three-factor formula for allocation to business segments. This formula is the simple average of the business segment's payroll, operating revenue, and net book value of capital assets and inventories as a proportion of the company's total for these three factors.

It should be noted that CAS 403 does have a provision allowing management flexibility. It specifically permits a special allocation when the government and contractor can agree that an inequitable allocation of residual expenses would result from strict compliance with the standard. For example, situations involving government-owned and contractor-operated plants, foreign subsidiaries, or sales subsidiaries could require special allocations rather than strict use of the three-factor formula. In such situations, certain segments may have operations that are relatively self-sufficient and require only minimal management and administrative support from the corporate or home office. Conversely, a segment may require a special allocation in greater amounts if it is highly dependent upon the home office or corporate staff for management and administrative support.

CAS 404: Capitalization of Tangible Assets.

Contractors must have a written capitalization policy for distinguishing between capital assets and expenses that is reasonable and consistently applied. The standard requires capitalization for those assets that have a service life of at least two years and an acquisition cost of \$5000 or more. Shorter service lives and smaller amounts may be substituted by the contractor. Costs necessary to bring an asset on line, such as installation and initial testing and inspection, if they are material, must also be capitalized. Tangible capital assets constructed by a contractor for its own use must be capitalized at amounts that include all indirect costs properly allocable to such assets, including an allocation of G&A expenses and the cost of money. Leased assets that are considered to be purchases are also subject to the standard.

CAS 406: Cost Accounting Period. This standard provides that the cost accounting period used by a contractor must be either its fiscal year or a fixed annual period other than its fis-

cal year (if agreed to with the government). The idea of a monthly cost accounting period is not appropriate for contract cost accounting purposes. Direct and indirect costs are not incurred evenly during the fiscal year. In practice, it is common to have large variances in amounts each month, particularly with the direct allocation bases, such as direct labor or machine hours. Capital asset decisions regarding the acquisition of fixed assets, such as plant and equipment, are made on a long-term rather than a short-term basis. Consequently, monthly indirect expenses for depreciation of fixed assets are not meaningful. It is possible that a given contract could be fully performed within only a few months of a contractor's fiscal year. In such cases, this standard would prevent either party to the contract from insisting upon monthly overhead rates in order to maximize or minimize their share of indirect cost. The period to determine the total costs allocable to a contract is the entire cost accounting period, which is the contractor's fiscal year. All indirect rates used for estimating, accumulating, and reporting costs must be based on the contractor's fiscal year.

CAS 410: Allocation of Business Unit General and Administrative Expense to Final Cost Objectives. The standard defines the types of expenses that are considered to be general and administrative expenses and provides acceptable criteria for allocating such expenses to final cost objectives of the business segment. The accounting for general and administrative expenses represents one of the very significant differences between commercial accounting practices and government contract accounting practices. For commercial accounting purposes, such costs are normally treated as expenses related to the total operation of the business and not related to production of a specific item. The expenses are considered to be "period expenses" and not "product costs." Commercial companies typically do not make any efforts to

allocate such period expenses to final cost objectives, such as specific products or contracts. Therefore, in the commercial world, general and administrative expenses are simply deducted as expenses on the business segment income statement to arrive at net profit or loss for the accounting period. From the contractor's perspective, this practice is totally unacceptable for government contracting purposes. The contractor must allocate all costs to contracts in order to ensure that he at least recovers his costs (much less makes a profit) on negotiated contracts. Therefore, for government contracting purposes, general and administrative expenses must be treated as part of contract cost. Cost accounting practices have been developed unique to government contracting to allocate such costs to contracts.

Business unit general and administrative expenses are required to be included in a separate indirect cost pool and are to be allocated only to final cost objects or contracts. G&A is defined for government contracting purposes as an expense incurred for managing and administering the business unit as a whole. It does not include those management expenses whose causal or beneficial relationship can be more directly allocated. Therefore, any management expenses that can be more directly allocated should be removed from the G&A expense pool. Examples of such expenses could be purchasing, subcontract administration, and program management. Purchasing, for example, could be more appropriately allocated based on the number of purchase orders or on the value of materials purchased, instead of being a part of the G&A cost pool.

From an industry perspective, the most controversial issue regarding CAS 410 has been the designation of specific allocation bases. The standard requires the use of a cost input base that best represents the total activity of the business unit. The bases used are total cost input,

value added input, or a single cost element input such as direct labor hours or dollars. The intent of the standard is that all activities that represent the productive activity of the business segment should be included in the allocation base. For example, the costs of intercompany transfers should be included in the allocation base and such transfers should bear G&A. The standard prevents the use of allocation bases other than cost input, such as cost of sales, employee head count, or a broad formula approach such as the three-factor formula used for allocating residual home office expenses. The total cost input base is the most common method used by defense contractors to distribute or allocate general and administrative expenses. Total cost input is the total cost placed into work-in-process during the contractor's fiscal year. Although it is commonly said that total cost input is the preferred method for allocating G&A, the standard does not provide any preference for this method. In fact, a valueadded base may be the most appropriate base in some circumstances. A value-added cost input base is total cost input less material and subcontract costs. This base should be used where the inclusion of materials and subcontract cost would significantly distort the allocation of G&A, such as when there is significant use of government-furnished components for which there would be no materials cost to the contractor.

CAS 410 does have some flexibility as a special allocation of G&A is permitted if the government and the contractor can agree in advance that a particular contract receives significantly more or less benefit from G&A expenses than that which would be received with an allocation based on a cost input base.

CAS 418: Allocation of Direct and Indirect Costs. Of all the cost accounting standards issued, CAS 418 is probably the most valuable from the standpoint of providing authoritative

criteria for the management of indirect costs. This standard, which was highly controversial with defense contractors when first issued, requires the consistent classification of direct and indirect costs, establishes criteria for the accumulation of indirect costs into "homogeneous" cost pools, such as operational overhead pools and service centers, and provides guidance relating to the selection of allocation methods based on the "beneficial or causal" relationship between an indirect cost pool and cost objectives.

In order to comply with CAS 418, the contractor must have a written statement of accounting policies and practices for classifying costs as direct or indirect. The contractor's indirect costs must be grouped into logical and homogeneous indirect cost pools. This requirement means that the cost of functions or activities that are to be pooled must have the same or similar beneficial or causal relationship to cost objectives. This concept of homogeneity is achieved if the activities or functions in the pool are the same or similar, if the activities or functions are unlike but the relationship to benefiting cost objectives are the same or similar, or if the final output of goods and services is the same or similar. An example of an indirect cost pool that would be considered to be homogeneous would be when a contractor accumulates all costs relating to the activities of building ownership, maintenance, and utilities into one indirect cost pool, designated as "occupancy cost," for subsequent allocation to all cost objectives. Although the costs of these activities represent unlike costs, each of the activities has the same or similar relationship to all cost objectives that occupy space in the contractor's facility. On the other hand, assume that a contractor includes the indirect costs of machining and assembling activities into a single manufacturing overhead pool. The machining activity may not have the same or similar beneficial or casual relationship to contracts or cost objectives as does the assembling activity. In this case, the contractor's single manufacturing overhead pool would not be homogeneous in accordance with the provisions of CAS 418, and separate pools would be required to comply with the standard.

The lack of homogeneity of indirect cost pools may often occur when a contractor's activities are decentralized. The use of separate indirect cost rates for each geographical location will normally produce more equitable allocations of indirect costs than the use of composite or company-wide rates. When off-site work—away from a contractor's plant—is performed at government facilities, separate off-site rates are usually required. Off-site overhead rates should be based on eliminating from the overhead pool those indirect costs that do not benefit off-site activities. For example, occupancy costs may be eliminated from off-site pools because the contractor uses government facilities rather than company-owned facilities.

From the government's perspective, it is generally maintained that the subdividing of indirect cost pools provides more accurate cost information for government contracts. But the number and type of cost pools should be governed by practical considerations. Some defense contractors have been very concerned about government personnel advocating a very large increase in the number of indirect cost pools. While additional cost pools may provide, to some degree, better matching of costs incurred to benefits received, contractors are concerned that it could create pricing problems, because of the sensitivity of smaller pools to changes in volume. For example, under the assumption that a contractor has a single plant-wide manufacturing overhead rate, if business volume should shift between several products, the changes in volume would cancel out and the overhead rate would not significantly change. But if each product has its own indirect cost pool, then the

several indirect rates could vacillate significantly if business volume changes. Also, from the contractor's perspective, it is more costly from an administrative standpoint to manage a large number of cost pools.

CAS 418 provides considerable guidance for selecting allocation bases for various indirect cost pools. To understand the allocation of operational indirect cost pools, a comparison with the allocation of the business segment G&A cost pool is beneficial. Recall that G&A costs relate to the operation of the business as a whole and the costs are allocated under CAS 410 on a base representing total activity. On the other hand, operational indirect cost pools are related to the production of goods and services and not to the operation of the business segment as a whole. Indirect costs related to the production of goods and services are allocated over the appropriate measure of productive activity. Basically, there are two kinds of operational indirect cost pools. They are set apart in CAS 418 as either cost pools that do or do not contain a material amount of the costs of management or supervision of activities involving direct labor or direct material costs. Indirect cost pools with a material amount of the costs of management or supervision are commonly referred to as overhead or burden pools. Those that do not contain these costs are commonly referred to as service or support centers. The preferred allocation bases set out in CAS 418 are contingent upon whether the cost pools contain material amounts of management or supervisory costs.

For cost pools containing significant management or supervisory cost, the preferred allocation base is direct labor hours or dollars, machine hours, units of production, or the appropriate measure that is representative of the activity being supervised. The most common base used for allocating overhead is direct labor dollars. This base is usually representative of the activity being supervised and the information

is readily available from the contractor's payroll and labor distribution records.

CAS 418 provides preferred hierarchical guidance for the allocation of indirect cost pools that do not include material amounts of the cost of management or supervision of activities involving direct labor or direct material costs. These indirect cost pools are referred to as service centers or support centers. Such centers are found throughout a business segment and constitute certain activities that usually feed productive functions or support management. Examples of such activities are computer services, company aircraft, transportation services, and print shops. The preferred allocation base is one that measures resource consumption, such as labor hours or machine hours expended in rendering the services. The second order of preference is measure of output, such as the number of units produced or reports processed. If neither of the first two measures is usable, a surrogate measure of output or activity that varies in proportion to the services received may be used, such as the number of employees serviced.

It should be realized that any given allocation base may be an acceptable base in a particular case and unacceptable in another. For example, a weakness of the most common overhead allocation base, direct labor dollars, is that the total direct labor cost represents the sum of the high- and low-wage workers. When labor categories within an overhead pool vary significantly, such as when there are high-priced research mechanics working with low-paid production workers, overhead cost allocations will be significantly different than if labor hours were used. In this case, if labor cost is used as a base, more overhead will be allocated to work performed by the higher paid workers. This allocation process could cause an overstatement of the overhead allocated to the work performed by higher paid employees.

Total direct material dollars may not be an appropriate base for allocating material handling costs if it includes significant costs for items that are not received at the contractor's plant but are shipped directly to end users. In addition, in some cases, the materials that are higher in costs, such as subcontracted items, may be far more expensive to purchase and handle. A separate overhead pool may be appropriate for the higher valued, more complex items required to be procured through major subcontracts. Also, in cases where there are two or three products produced, and one is fabricated with very expensive material and the others composed of something less expensive, the product with the high material costs would absorb a disproportionate share of the overhead expense. This problem could be very major from a financial standpoint when government-furnished equipment is provided by the government at no cost to the contractor and the allocation base used is direct material dollars.

The use of machine hours as an allocation base for manufacturing overhead is appropriate when investments in plant and equipment are substantial and manual labor is of lesser importance. With the recent increases in automated manufacturing operations, the use of machine-oriented bases will become more relevant in distributing indirect costs. The primary objection to the use of machine hours as an allocation base in the past has been the absence of adequate records on machine utilization for many pieces of equipment. Management is generally opposed to the establishment of new machine utilization records and the collecting of special cost data not otherwise required for management control purposes. With the recent emphasis on improving the accuracy of indirect cost allocation, in the future substantial emphasis will likely be placed on analyzing the various activities of a business, such as the volume of shop orders, engineering changes, and purchase requisitions.

Government acquisition personnel often get very involved in examining the indirect cost pool structure and the various allocation bases used by contractors. Their objective is to satisfy themselves that indirect cost allocations on negotiated contracts are fair and equitable and consistent with CAS 418. When CAS 418 was originally issued, the CASB intended that the creation of additional indirect cost pools would be required only if the changes would result in material differences in allocations of indirect cost. In addition, from an industry perspective, the general rule is that a smaller number of indirect cost pools is better unless a material difference in the allocation of indirect costs would occur. If government acquisition personnel believe that the contractor's overhead pool structure is not fair and equitable for some reason, they should be able to show that a material misallocation of costs to government contracts is the result—prior to recommending changes to the existing indirect cost pool structure.

The CASB realized that unique problems in cost allocation could occur and provided flexibility to the contracting parties. When a particular contract in relation to other contracts receives significantly more or fewer benefits from an indirect cost pool than would be reflected by the allocation of such costs using a base determined pursuant to CAS 418, the government and contractor may agree to a special allocation from that indirect cost pool to the particular contract.

CAS 420: Accounting for Independent Research and Development and Bid and Proposal Costs. This standard is concerned with defining Independent Research and Development (IR&D) and Bid and Proposal (B&P) cost, providing the criteria for accumulating these two very significant costs, providing criteria for allocating these costs to cost objectives, and ensuring consistency among contractors in the accounting for IR&D/B&P costs. Independent

research and development is defined as the cost of effort that is not sponsored by a grant or otherwise required in performance of a contract, which falls within the areas of basic and applied research, development, and systems and other concept formulation studies. B&P cost is defined as the cost of preparing, submitting, or supporting any bid or proposal that is not supported by a grant or otherwise required in performance of a contract.

The standard requires that the basic unit for the identification and accumulation of IR&D and B&P costs will be the individual IR&D or B&P project. The individual project cost consists of all costs, both direct and indirect, allocated to that effort except business unit G&A. For example, if an engineer is working on an IR&D project in the engineering organization, the cost of the project will include both engineering direct labor and engineering overhead. Of course, if materials were used on the project, direct material and material overhead would also be added to the total project costs. G&A is excluded because IR&D and B&P costs are of the same nature as G&A costs.

The standard requires that all IR&D and B&P costs accumulated at the segment level must be allocated to all final cost objectives at the business unit by means of the same base used by the business unit to allocate its G&A costs. The standard further provides that any IR&D and B&P costs accumulated at the home office that can be identified with a specific segment should be allocated to that segment. All other IR&D and B&P costs accumulated at the home office should be allocated among all segments by means of the same base used to allocate residual expenses as per CAS 403.

If a company has several segments performing IR&D projects that are technically applicable to only a portion of these segments, the standard provides that the cost of those projects be

allocated to the benefiting segments. The standard also permits a special allocation in unusual circumstances with an advance agreement required between the two parties.

CONTRACT PRICE ADJUSTMENTS

It is quite obvious that the requirements of the cost accounting standards are written primarily with the government's interest in mind. In fact, the government exercises tremendous power through the administration of the CASs because it can adjust a contract price after negotiations are completed. If a contractor fails to follow his disclosed cost accounting practices or comply with a cost accounting standard and as a result government costs are increased on a CAS-covered contract, the government is entitled to a downward price adjustment with interest. Any disagreements between the government and contractors regarding compliance are handled as disputes under the contract.

The government's right to a price adjustment on all CAS-covered contracts does not mean that a contractor cannot change his accounting system. Contractors often change their accounting systems subsequent to negotiations with the government. However, they must notify the government, in writing, of any proposed changes 60 days before the planned implementation. The notification is to include a description of the accounting change and an estimate of the general dollar magnitude that the change will have on all CAS-covered contracts. Subsequent to the notification of the change and when a more comprehensive analysis of the change has been completed, the contractor is required to submit a detailed proposal of the cost impact of the changes. If the proposed change decreases costs to the government, a downward adjustment will be negotiated. The government will allow a cost increase only if the contracting officer determines that the change is desirable and not detrimental to the government.

Both the government and the contractor can request a change in accounting practices. Over time, cost accounting practices that were once equitable may become inequitable due to changed circumstances. Consequently, to remain in compliance with the standards, contractors may need to change their cost accounting practices. For example, changes in manufacturing processes and practices, changes in product mix, conversion from direct labor to machine hour allocation bases, or adoption of standard costs may necessitate the revision of existing indirect cost rate structures. At the present time, the large-scale restructuring activities going on in corporations in the defense industry will probably initiate many accounting system changes. The current managerial emphasis on total quality management programs, such as efforts to reduce overhead costs or adoption of best practices, can also cause revisions in cost accounting practices.

Government acquisition personnel should be aware that accounting changes should be viewed from a long-term, total company perspective as opposed to a short-term, program perspective. A given program indirect cost allocation could be increased on a short-term basis; however, on a longer term basis the net effect could be lower costs for the government as a whole because other programs receive fewer cost allocations in the future. As an example, it would appear that in the long run restructuring changes should result in efficiencies and lower costs for the government. This is one of the primary reasons that the administration of the CASs is done by the administrative contracting officer (ACO). The ACO must view the contractor from a total company perspective and not from a program-specific perspective.

COST ACCOUNTING STANDARDS

CAS 401: Consistency in Estimating, Accumulating, and Reporting Costs. The cost accounting practices used in accumulating and reporting of actual cost must be consistent with the practices used in estimating costs in pricing proposals. Cost estimates must be prepared in such detail so that any significant cost can be subsequently compared with actual cost accumulations. The purpose of this standard is to enhance the likelihood that comparable transactions are treated alike and to obtain improved reliability of estimates and comparisons with performance.

CAS 402: Consistency in Allocating Cost Incurred for the Same Purpose. The same type of cost must be consistently classified as direct or indirect with respect to all work performed. The purpose of this standard is to require that each type of cost is allocated only once and on only one basis to any contract or other cost objective in order to prevent overcharging of some contracts and to eliminate double counting.

CAS 403: Allocation of Home Office Expenses to Segments. Establishes the criteria for allocation of home office expenses to segments and minimizes the amount of such expenses classified as residual. Home office expenses are to be directly allocated to the extent practical on the basis of the beneficial or casual relationship between the home office and segments. Home office expenses that are deemed residual expenses, which are those expenses that are not identifiable with specific activities of segments, such as the expenses of the Chief Executive Officer, must

be allocated in accordance with a three-factor formula when they exceed certain amounts. The three factors are operating revenue, payroll, and capital assets plus inventories. When the three-factor formula is not required, residual expenses must be allocated over a base that is representative of the total activity of the segments.

CAS 404: Capitalization of Tangible Assets. This standard facilitates the consistent measurement of costs based on a capitalization policy that adheres to the criteria of the standard. Contractors must have and consistently follow a written policy on capitalization practices. Currently, the acquisition cost of tangible assets must be capitalized when the acquisition cost is greater than \$5,000 and the estimated service life exceeds two years.

CAS 405: Accounting for Unallowable Costs. The purpose of this standard is to facilitate the negotiation, audit, and settlement of unallowable costs. Unallowable costs must be segregated and identified as such in all pricing and billing to the government. The maintenance of records in sufficient detail to provide visibility of unallowable costs and the accounting treatment of such costs is required.

CAS 406: Cost Accounting Period. This rule provides criteria for the periods to be used as cost accounting periods for contract estimating, accumulating, and reporting of cost. A contractor must use his fiscal year as his cost accounting period for developing overhead rates for pricing and charging any government work performed during the fis-

Exhibit 14. Cost Accounting Standards

COST ACCOUNTING STANDARDS (continued)

cal year, unless there is a mutually agreed-to period that is the established practice of the contractor.

CAS 407: Use of Standard Costs for Direct Material and Direct Labor. Provides the criteria for using standard costs for estimating, accumulating, and reporting costs of direct material and direct labor. The standard also provides criteria relating to the establishment of standards, accumulation of standard costs, and disposition of variances from standard costs. The stated criteria must be met before standard costs may be used for government contracts.

CAS 408: Accounting for Costs of Compensated Personal Absence. Compensated personal absence costs are to be assigned to the cost accounting period in which the entitlement is earned. Entitlement is recognized on an accrual basis at the time the employer becomes liable to pay in the event of a layoff or other disciplinary termination. The purpose of this standard is to assign costs to the cost accounting period in which the related labor is performed and in which labor costs are recognized.

CAS 409: Depreciation of Tangible Capital Assets. Provides criteria for assigning costs of tangible assets to cost accounting periods and for consistent allocation of those costs to cost objectives. The contractor may select any appropriate method of depreciation that reflects the pattern of consumption over the life of the asset. Estimated service lives are not to be less than the life spans that are supported by the contractor's records of past experience. Estimated residual values

must be determined for all capital assets or groups of assets. The estimated residual value must be deducted from the capitalized value in computing the depreciation cost base except in certain limited circumstances. Depreciation of assets used by service centers should be charged to the service center. Depreciation costs are generally allocated as indirect expenses to contracts. They may be charged directly only if the charges are based on usage and the costs of like assets used for similar purposes are also charged direct.

CAS 410: Allocation of Business Unit General and Administrative Expense to Cost Objectives. This standard provides criteria for the allocation of the cost of general and administrative expenses based on their beneficial or causal relationships. Business segment G&A must be grouped in a separate indirect cost pool and allocated on a base measured by cost input. Three types of cost input allocation bases are provided; total cost input, value added input, and single element cost input. General and administrative expenses whose beneficial or causal relationship to cost objectives can be more directly measured by other than cost input are to be excluded from G&A and must be separately allocated.

CAS 411: Accounting for Acquisition Costs of Material. This requires the contractor to have written statements of accounting policies and practices for accumulating the costs of material and for allocating costs of material to cost objectives. Material inventory records must be kept for each category of material with some exceptions. The standard provides that material specifically acquired

COST ACCOUNTING STANDARDS (continued)

for identified contracts may be charged directly to the contract. The cost of material used solely in performing indirect functions or which is not a significant element of production cost may be allocated to an indirect cost pool. The acceptable methods of costing when issuing material from inventory are; FIFO (first-in, first-out), moving or weighted average, standard cost, or LIFO (last-in, first-out).

CAS 412: Cost Accounting Standards for Composition and Measurement of Pension

Costs. Prior to this standard, there was no authoritative guidance regarding components of pension costs that could be properly included as contract costs, or any criteria for measuring and assigning pension costs to cost accounting periods. This standard establishes the components of pension costs and the bases for measuring such costs. The standard also provides criteria for determining the amount of pension cost to be assigned to cost accounting periods.

CAS 413: Adjustment and Allocation of Pension Costs. This standard provides for adjustment of pension cost for actuarial gains and losses, their assignment to cost accounting periods, and bases for allocation of pension costs to business segments. Actuarial gains and losses are to be calculated annually and are to be assigned to the cost accounting period for which the actuarial valuation is made and to subsequent accounting periods. Pension costs are to be measured by the valuation of pension fund assets using a method that recognizes fair market values with consideration for short-term market fluctuations. Pension plan costs are to be separately allocated to segments based on active participation of employees.

CAS 414: Cost of Money as an Element of the Cost of Facilities Capital. This provides for the explicit recognition of the cost of money for facilities capital as an element of contract costs. A contractor's net book value of facilities is measured and allocated in accordance with set criteria. The allocated amount is used as a base to which a cost of money rate is applied. The rate is based on interest rates determined by the Secretary of the Treasury. Facilities capital items include recorded facilities, land, leased property, and corporate or group facilities. A facilities capital cost of money factor is developed for each indirect cost pool for which a significant amount of facilities capital has been allocated. The cost of capital committed to facilities is separately computed for each contract.

CAS 415: Accounting for the Cost of Deferred Compensation. This rule provides criteria for the measurement and assignment of deferred compensation costs to cost accounting periods. The cost of deferred compensation is to be assigned to the cost accounting period in which the contractor incurs an obligation to compensate the employee. The measurement of the amount of the deferred compensation is the present value of the future benefits to be paid by the contractor.

CAS 416: Accounting for Insurance Costs.

This standard provides criteria for the measurement of insurance costs, the assignment of such costs to cost accounting periods, and their allocation to cost objectives. The amount of insurance cost to be assigned to a cost accounting period is the projected aver-

COST ACCOUNTING STANDARDS (continued)

age loss for that period plus insurance administrative expenses in that period. Insurance costs are to be allocated to cost objectives on the basis of the beneficial or causal relationship between the insurance costs and the benefiting or causing cost objectives.

CAS 417: Cost of Money as an Element of the Cost of Capital Assets Under Construction. Establishes criteria for the measurement of the cost of money attributable to capital assets under construction, fabrication, or development as an element of the cost of those assets. This standard improves cost measurement by providing for recognition of cost of contractor investment in assets under construction; and provides greater uniformity in accounting for asset acquisition costs.

CAS 418: Allocation of Direct and Indirect Costs. This provides for consistent determination of direct and indirect costs, provides criteria for the accumulation of indirect costs, including service center and overhead costs in indirect cost pools, and provides guidance relating to the selection of allocation measures based on the beneficial or causal relationship between an indirect cost pool and cost objectives. For those indirect cost pools containing a material amount of the costs of management or supervision of activities involving direct labor or materials, the selected allocation base is to be representative of the activity being managed or

supervised (e.g., direct labor, machine hours, direct materials). For indirect cost pools that do not contain a material amount of management or supervision costs, the allocation base shall be, in order of preference: an appropriate measure of resource consumption, measure of output of the activities, or a surrogate measure that varies in proportion to the services received.

CAS 419. This standard was consolidated with CAS 418 after comment.

CAS 420: Accounting for Independent Research and Development Costs and Bid and Proposal Costs. This rule provides criteria for the accumulation of independent research and development (IR&D) costs and bid and proposal (B&P) costs. It also provides criteria for the allocation of such costs to cost objectives based on the beneficial or causal relationship between such costs and cost objectives. The standard provides that the basic unit for the identification and accumulation of IR&D/B&P is the individual project, which is to include all allocable costs, including materials and overhead, except G&A expenses. IR&D and B&P expenses that are not allocated by a special allocation based on a beneficial or causal relationship must be allocated to final cost objectives on the same base used to allocate general and administrative expenses.